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Mazdoor Kisan Shakti Sangathan

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“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 4586-1-7 (1987): Dimensions of spindles and mounting arrangements for spindle operated electronic components, Part 1: Spindles, Section 7: Concentric spindle [LITD 3: Electromechanical Components and Mechanical Structures for Electronic Equipment]

“ज्ञान से एक नये भारत का निर्माण”

Satyanareshwar Gangaram Pitroda

Invent a New India Using Knowledge



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartṛhari—Nītiśākām

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard

**DIMENSIONS OF SPINDLES AND MOUNTING
ARRANGEMENTS FOR SPINDLE OPERATED
ELECTRONIC COMPONENTS**

PART 1 SPINDLES

Section 7 Concentric Spindle

(Second Revision)

0. General — This standard (Part 1/Sec 7) shall be read in conjunction with IS : 4586 (Part 1/Sec 1) - 1987 'Dimensions of spindles and mounting arrangements for spindle operated electronic components: Part 1 Spindles, Section 1 General and definitions (second revision)'.

1. Scope — Covers dimensions of concentric spindles.

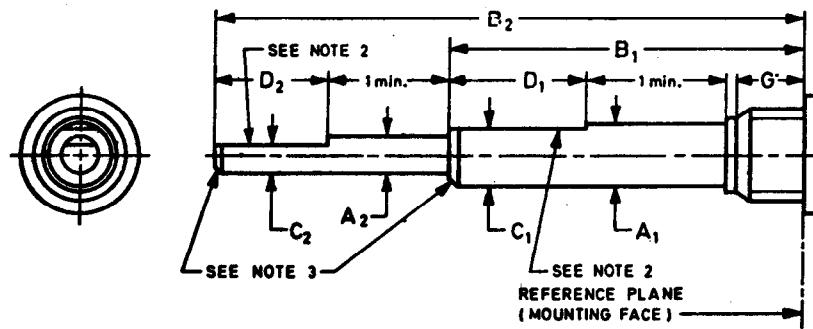
2. Dimensions — See Tables 1 and 1A.

TABLE 1 DIMENSIONS OF CONCENTRIC SPINDLE

(Clause 2)

All dimensions in millimetres.

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Dimension A_1 $h11^*$	Dimension A_2 $h11^*$	Dimension B_1 (see Note 1)								Dimension B_1	Dimension C_1	Dimension C_2		Dimension D_1	Dimension D_2	Dimension G , Min (see Note 4)	
		10 ± 0.5	16 ± 0.5	20 ± 0.5	32 ± 0.5	34.5 ± 0.5	40 ± 1	50 ± 1	63 ± 1			Screwed Knob	Push-on Knob				
$4^{+0}_{-0.075}$	$2^{+0}_{-0.06}$	↑	↑	↑	↑	↑	↑	↑	↑		Not applica- ble	Not applica- ble	Not applica- ble				
$6^{+0}_{-0.075}$	$3^{+0}_{-0.06}$										$5.3^{+0}_{-0.2}$	$2.5^{+0}_{-0.1}$	$2^{+0}_{-0.1}$				
$6^{+0}_{-0.075}$	$4^{+0}_{-0.075}$										Not applica- ble	$3.5^{+0}_{-0.1}$	$3^{+0}_{-0.1}$				
$6.35^{+0.03}_{-0.08}$	$3.17^{+0.03}_{-0.06}$	↓									$B_1 + 10$ or $B_1 + 1.5$ Tolerance ± 1	5.54 ± 0.13	2.36 ± 0.06	2.08 ± 0.6	From 4 in increments of 2, Tolerance ± 0.5	From 4 in increments of 2, Tolerance ± 0.5	No Bush 4 5 7 10
$6.35^{+0.03}_{-0.08}$	$4.76^{+0.03}_{-0.06}$										$6.02^{+0}_{-0.08}$	3.96 ± 0.06	3.96 ± 0.06				
$8^{+0}_{-0.09}$	$4^{+0}_{-0.075}$								↑		$7^{+0}_{-0.2}$	$3.5^{+0}_{-0.1}$	$3^{+0}_{-0.1}$				
$10^{+0}_{-0.09}$	$4^{+0}_{-0.075}$										$9^{+0}_{-0.2}$	$3.5^{+0}_{-0.1}$	$3^{+0}_{-0.1}$				
$10^{+0}_{-0.09}$	$6^{+0}_{-0.075}$		↓	↓	↓	↓	↓	↓	↓		$9^{+0}_{-0.02}$	$5^{+0}_{-0.2}$	$4^{+0}_{-0.1}$				

Note 1 — If intermediate values are required, they should preferably be chosen from the R20 series (mm) [see IS : 1076-1967 Preferred numbers (first revision)].

Note 2 — Flat to dimensions C and D are optional as shown in the table.

Note 3 — Chamfer at $40/50^\circ$ or a radius for a depth of between 5 and 10 percent of dimension A_1 and A_2 .

Note 4 — Fixing of bush may be done by pressing a 'C' washer in the groove cut in the shaft to a depth of 1 to 1.5 mm.

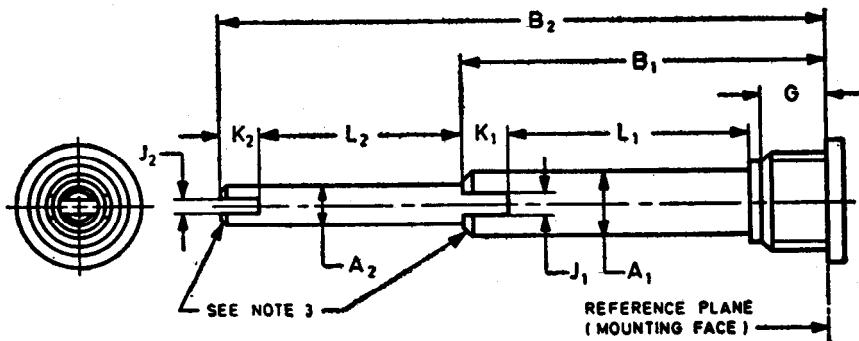
Note 5 — Dimensions apply to spindles after suitable finish.

*IS : 919 (Part 1)-1963 'Recommendations for limits and fits for engineering : Part 1 General engineering (first revision)'.

TABLE 1A DIMENSIONS OF ALTERNATIVE CONCENTRIC SPINDLES

(Clause 2)

All dimensions in millimetres.



Dimension A_1 $h\ 11^*$	Dimension A_2 $h\ 11^*$	Dimension B_1 (see Note 1)	Dimension B_2	Dimension G , Min (see Note 5)	Dimension J_1	Dimension J_2	Dimension K_1 (see Note 2)	Dimension K_2 (see Note 4)
$6^{+0}_{-0.075}$	$4^{+0}_{-0.075}$	10 ± 0.5						
		16 ± 0.5						
		20 ± 0.5	$B_1 + 10$	No Bush	3 ± 0.2	1 ± 0.2	6 ± 0.5	10 ± 0.5
		32 ± 0.5	or $B_1 \pm 12.5$,	4			12 ± 0.5	
		40 ± 1.0	Tolerance	5				
		40 ± 1.0		7				
		50 ± 1.0		10				
		63 ± 1.0						
		80 ± 1.0						

Note 1 — If intermediate values are required, they should preferably be chosen from the R20 series (mm) [see IS : 1076-1967 Preferred numbers (*first revision*)].

Note 2 — Subject to a minimum of 1 mm for dimension L_1 .

Note 3 — Chamfer at 40/50° or a radius for a depth of between 5 and 10 percent of dimensions A_1 and A_2 .

Note 4 — Subject to a minimum of 1 mm for dimension L_2 .

Note 5 — Fixing of bush may be done by pressing a 'C' washer in the groove cut in the shaft to a depth of 1 to 1.5 mm.

Note 6 — Dimension apply to spindles after suitable finish.

*IS : 919 (Part 1)-1963 Recommendations for limits and fits for engineering : Part 1 General engineering (*first revision*).